PACIFIC FERN BUSINESS PARK - LOT 2

GENERAL NOTES:

GENERAL REQUIREMENTS

1. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION" (WSDOT SPECS.), THE CITY OF FERNDALE DEVELOPMENT STANDARDS (COFDS) AND THE 2005 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.

2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.

3. THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

4. CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 a.m. TO 8 p.m., MONDAY THROUGH FRIDAY.

5. THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES.

6. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.

8. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.

9. THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHTS-OF-WAY.

10. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AND THE ENGINEER OF RECORD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.

11. ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOW:
A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
B. CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
C. PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS-OF-WAY OR IN WATERLINE EASEMENT TO BE DEDICATED TO THE CITY OF FERNDALE.
D. PLACMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE. OR OTHER PUBLICLY SHARED FACILITIES.
E. GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
1. COMPLETION OF EXCAVATION TO SUBGRADE.
2. COMPLETION OF BALLAST COURSE PLACEMENT.
3. COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
F. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC OR PRIVATE ROADWAY.
G. ASPHALT PAVING IN PROGRESS IN PUBLIC OR PRIVATE ROADWAY
H. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
I. END OF MAINTENANCE PERIOD.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK. ALL SECTIONS OF THE WSDOT SPECS., 1-07.23- TRAFFIC CONTROL, SHALL APPLY.

13. THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.

14. AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDALE DATUM – VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.

15. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

16. ALL DISTURBED AREAS SHALL BE COVERED WITH MULCH OR WOOD CHIPS WHILE NOT UNDER CONSTRUCTION.

17. AN APPROVED COPY OF THESE PLANS MUST BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

SEWER NOTES:

A. SEWER PIPE SHALL BE IN ACCORDANCE WITH WSDOT 9-05.12. BEDDING AND BACKFILL FOR SEWER PIPE SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE SS-15 AND SS-1

B. CONNECTIONS TO EXISTING SEWER SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF FERNDALE.

C. SANITARY SEWER SERVICES SHALL BE PVC PIPE CONFORMING TO ASTM D3034 SDR 35 AND IN IN ACCORDANCE WITH CITY OF FERNDALE STANDARD PLAN SS-6. BEDDING AND BACK FILL SHALL BE AS SHOWN IN THE STANDARD DETAILS. ALL SIDE SEWERS SHALL BE INSTALLED AT A MINIMUM 2.0% SLOPE.

STORM NOTES:

A. TYPE 1 CATCH BASINS SHALL BE PER WS-DOT STANDARD PLAN B-1. TYPE 2 CATCH BASINS SHALL BE PER WS-DOT STANDARD PLAN B-1E. CONCRETE INLETS SHALL BE PER WS-DOT STANDARD PLAN B-26. WHERE LOCATED IN CURB GUTTER LINE CATCH BASIN SHALL BE THRU-CURB INLET FRAME AND GRATE IN ACCORDANCE WITH CITY OF FERNDALE STD. DRAWING R-8. VANED GRATES SHALL BE USED IN ACCORDANCE WITH WSDOT STD PLAN B-2b.

B. STORM DRAINAGE PIPE SHALL CONFORM TO WSDOT SECTION 7-01, AND CITY OF FERNDALE STANDARDS, SECTION 619.

UNDERGROUND UTILITIES CONSTRUCTION

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER OF RECORD TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, WATER SERVICE TAPS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE), VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE ENGINEER OF RECORD AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.

2. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
a) NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
b) WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
c) TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.
d) WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.

3. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.

4. TESTING OF NEW WATER AND SANITARY SEWER MAINS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.

5. OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE COF STANDARD TRENCH DETAIL.

BASE COURSES & CRUSHED SURFACING

1. GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET THE CURRENT EDITION OF WSDOT STANDARD SPECIFICATIONS.

2. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.

3. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN ½ INCH OF FINISHED GRADE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

WATER

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:
PIPE BEDDING COFSD W-11
TRENCH BACKFILL COFSD W-11
FIRE HYDRANT ASSEMBLY COFSD W-1
THRUST BLOCKING COFSD W-2, W-3 & W-4
WATER SERVICE COFSD W-5

2. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE CURRENT EDITION OF THE WSDOT STANDARD SPECIFICATIONS.

3. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON PER SECTION 9-30.1(1) OF THE WSDOT SPECS., UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.

4. MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO SECTION 9-30.2(1) OF THE WSDOT SPECS.

5. CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE ENGINEER OF RECORD. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WSDOT SPECS. NO PRE-CAST BLOCKS ARE ALLOWED.

6. CONNECTIONS TO EXISTING WATER MAINS – THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.

7. ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24) OF THE WSDOT SPECS. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 225 PSI FOR 15 MINUTES AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE TESTS, CONDUCTED 24 HOURS APART. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE TESTING.

8. BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.

9. ALL PIPES SHALL HAVE A MINIMUM COVER OF 36" AND A MAXIMUM OF 42".

10. ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES. GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C509 AND SUITABLE FOR SERVICE WITH THE TYPE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.

11. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.

12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFSD W-1 AND THE FOLLOWING STANDARDS:
a. FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" MAIN VALVE OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE M&H 129 HYDRANTS.
b. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYDRANT MUST NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SHALL BE A MINIMUM OF 14" ABOVE THE GROUND.
c. IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE, APPROPRIATE HYDRANT GUARD POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED ACCESS. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT.
d. UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE INSPECTED. SUCH INSPECTION SHALL INCLUDE VISUAL INSPECTION OF PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 225 PSI FOR 15 MINUTES. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS COMPLETE.
e. FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENCES ABOVE GRADE LEVEL.

SHEET INDEX

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THE IMPROVEMENTS FOR PACIFIC FERN BUSINESS PARK – LOT 2 HAS BEEN INSPECTED BY APC ENGINEERS AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN GENERAL CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

NATHAN G. ROW, P.E. — DATE 6/27/2023

SURVEYORS CERTIFICATION

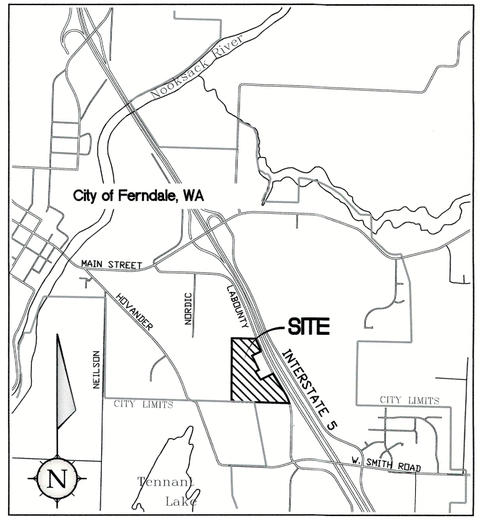
I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: JUNE 2023.

JEREMY DISCH, PLS — DATE 6/27/2023

APPROVED
JUL 07 2023
BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS-BUILT SURVEY/CONTRACTOR AS-BUILT/INSPECTOR COMMENTS

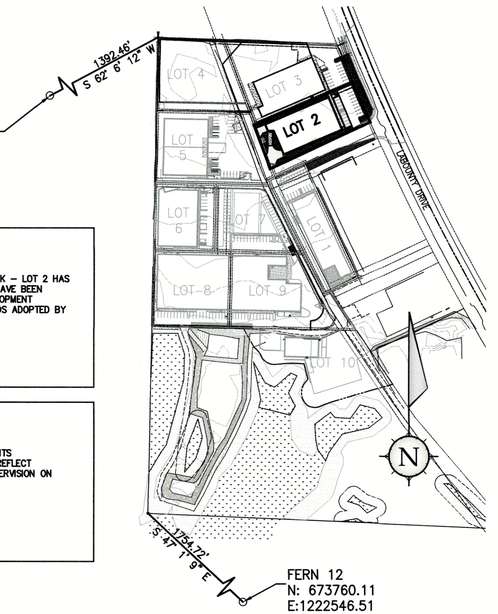
AS-BUILT – RECORD DRAWINGS
JUNE 2023



SCALE: 1" = 1500'

CITY OF FERNDALE, WA

OWNER:	SURVEYOR:	ENGINEER:
FABER CONSTRUCTION	POWERTEK SURVEYING	APC ENGINEERS
(360) 354-0335	(360)746-8801	(360)671-1146



SITE LOCATION MAP

SCALE: 1" = 200'

NATHAN GLENN ROW — STATE OF WASHINGTON — 80497 — REGISTERED PROFESSIONAL ENGINEER — 6/27/2023

FULL SIZE DRAWING SHEET IS 24"x36" REDUCED SIZE COPIES ARE NOT TO SCALE

CALL 2 DAYS BEFORE YOU DIG 1-800-424-5555

REVISIONS		
NO.	DATE	DESCRIPTION

APC ENGINEERING
Associated Project Consultants, Inc., P.S.
1401 Astor Street Bellingham, WA 98225
PHONE 360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

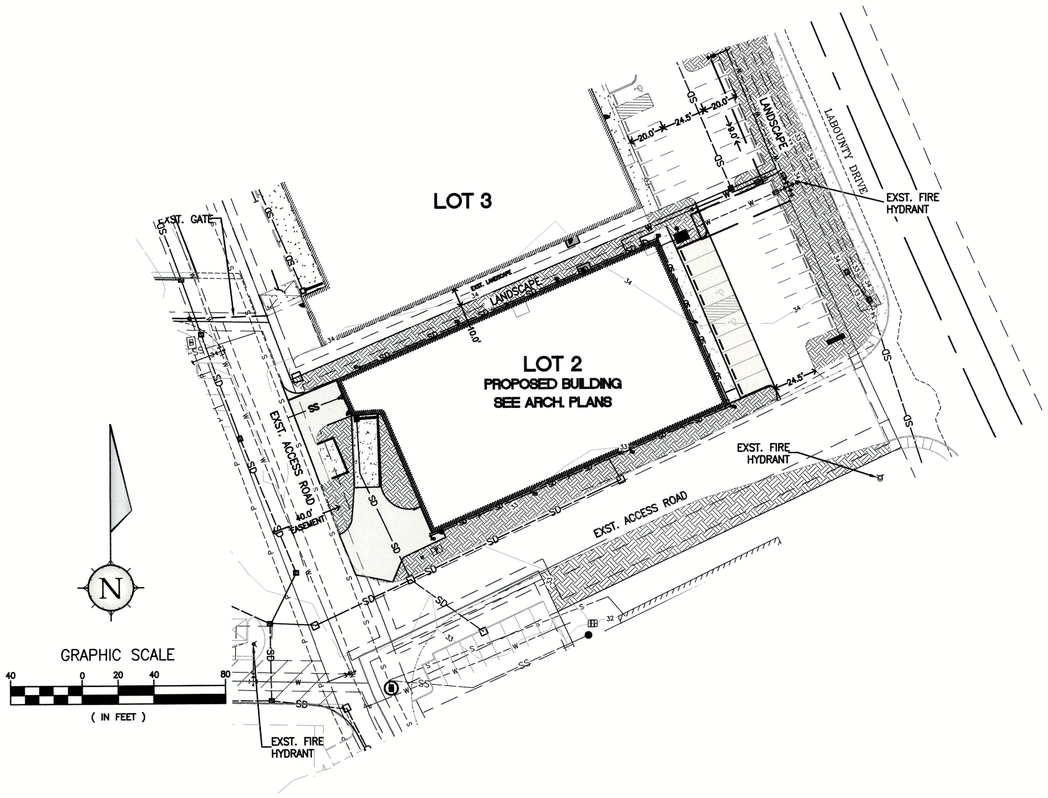
FABER CONSTRUCTION
PACIFIC FERN - LOT 2
COVER SHEET

APC PROJECT # 15-107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 1 of 6
1

00738.001 07/07/23 RH

Jun 27, 2023 - 10:22am 15-107F Site Plan Record Drawing.dwg



NOTE:
PRIVATE ACCESS ROAD (PACIFIC FERN LANE), OFF-SITE FRONTAGE IMPROVEMENTS, AND STORMWATER POND FACILITY PROVIDING WATER QUALITY TREATMENT AND FLOW CONTROL MITIGATION FOR THE PROPOSED DEVELOPMENT HAVE BEEN SEPERATELY APPROVED BY THE CITY OF FERNDALE FOR CONSTRUCTION. ALL IMPROVEMENTS REQUIRED TO SERVE SUBJECT LOTS MUST BE COMPLETED TO COMPLY WITH APPLICABLE STATE AND LOCAL DEVELOPMENT STANDARDS TO THE SATISFACTION OF THE FERNDALE DEPARTMENT OF PUBLIC WORKS PRIOR ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR ANY BUILDING ON THE SITE.

MAP NOTES

BASIS OF ELEVATION/ PROJECT BENCHMARK:	CITY OF FERNDALE (83/91) BEARING N43°14'31"E BETWEEN FERN 21 (C.O.F) AND FERN 360
VERTICAL DATUM:	CITY OF FERNDALE (NGVD 29) FERN12 – SURFACE MONUMENT ELEV: 31.27
SOURCE OF BOUNDARY:	PACIFIC FERN BUSINESS PARK GENERAL AND SPECIFIC BINDING SITE PLAN BY POWERTEK DATED 1/18/2019
SOURCE OF CONTOURS:	TOPOGRAPHIC SURVEY FROM WILSON SURVEY/ENGINEERING
CONTOUR INTERVAL:	1' CONTOURS CONTOURS ACCURATE TO ONE HALF THE CONTOUR INTERVAL UNLESS OTHERWISE NOTED.
SOURCE AND ACCURACY OF UTILITY INFORMATION:	EXISTING UTILITIES ARE SHOWN BASED ON UTILITY COMPANY PAINTED LOCATION MARKS AND CITY RECORD DRAWINGS, AND MAY NOT REPRESENT ALL UNDERGROUND OR ABOVE-GROUND UTILITIES OR SITE FEATURES. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE; THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
SCOPE OF WORK:	THE SCOPE OF WORK FOR PREPARATION OF THIS MAP AND ALL EXISTING AND PROPOSED FEATURES IS LIMITED IN THE EXTENT OF FIELD INVESTIGATIONS OF ABOVE AND BELOW GROUND FEATURES AND/OR UTILITIES, AND RELIES ON THE WORK OF OTHERS, INCLUDING SURVEYS, MAPS, RECORD DRAWINGS, AND OTHER INFORMATION SOURCES AS NOTED HEREON.

LEGEND

	EXISTING	PROPOSED
LOT LINE		
STREET CENTERLINE		
RIGHT-OF-WAY LINE		
UNDERGROUND POWER	P	P
UNDERGROUND TV	TV	
FIBER OPTICS	FO	
UNDERGROUND TELEPHONE	T	T
OVERHEAD POWER	OP	
OVERHEAD TELEPHONE	OT	
GAS MAIN	G	G
WATER MAIN	W	W
SANITARY SEWER MAIN	SS	SS
STORM DRAIN	SD	SD
DITCH/FLOW LINE		
EDGE OF PAVEMENT		
CURB AND GUTTER		
BUILDING WALL		
FENCE		
ROCKERY WALL		
ELEV. CONTOUR	100	100
TREES/VEGETATION		
STORM DRAIN CATCH BASIN	TYPE 1 TYPE 2	TYPE 1 TYPE 2
UTILITY POLE		
STREET/TRAFFIC SIGN		
SAN. SEWER MANHOLE	S	
SAN. SEWER CLEAN-OUT		
WATER SERVICE METER		
FIRE HYDRANT		

SITE PLAN NOTES

1. ALL DRIVING, PARKING, AND VEHICLE LOADING AREAS SHALL BE PAVED WITH AN ALL-WEATHER DRIVING SURFACE ACCEPTABLE TO THE COMMUNITY DEVELOPMENT AND PUBLIC WORKS DEPARTMENTS.

2. ALL PARKING AND ACCESS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).

3. BUILDING LIGHTING TO BE IN ACCORDANCE WITH THE ARCHITICTURAL PLANS AND BUILDING PERMIT DESIGN. PARKING LIGHTING LOCATIONS AS SHOWN ON THE SITE PLAN.

4. TRASH RECYCLING AREA LOCATION, DIMENSION, ACCESS, AND DETAILS TO BE IN ACCORDANCE WITH SANITARY SERVICE CO. (SSC) REQUIREMENTS.

5. MAILBOX AND POSTAL SERVICE LOCATION SHALL BE APPROVED BY THE FERNDALE POST OFFICE.

6. THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR, SEE GENERAL NOTES, THIS PLAN SET.

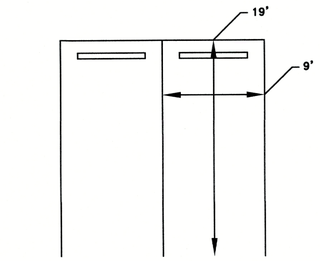
7. SITE PLAN INCLUDING PARKING LAYOUT, ACCESS LANES, AND TRUCK ACCESS TO BE VERIFIED AND APPROVED BY OWNER AND FABER BROTHERS CONSTRUCTION PRIOR TO CONSTRUCTION. SEE PROJECT ARCHITECTURAL PLANS FOR PARKING LAYOUT, LANDSCAPING REQUIREMENTS, LIGHTING, TRASH ENCLOSURE AND FENCING INCLUDING GATE DETAILS, ADA ACCESSIBILITY REQUIREMENTS, AND SIGNAGE.

8. FIRE HYDRANT LOCATIONS AND EMERGENCY ACCESS AND SAFETY PROVISIONS PENDING WHATCOM COUNTY FIRE DISTRICT #7 REVIEW. FIRE DISTRICT APPROVAL IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

9. ALL PARKING DIMENSIONS IN ACCORDANCE WITH CITY OF FERNDALE ZONING AND DEVELOPMENT STANDARDS, AND REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). ACCESSIBLE PARKING DESIGNATION BY ARCHITECT.

10. EXISTING SITE CONDITIONS, TOPOGRAPHY, EXISTING AND PROPOSED LOT LINE, EXISTING UTILITIES AND FEATURES SHOWN PER SURVEY PROVIDED BY POWERTEK SURVEYING.
BASIS OF BEARINGS: CITY OF FERNDALE (83/91) BEARING N43°14'31"E BETWEEN FERN12 (C.O.F.) AND FERN 360
VERTICAL DATUM: CITY OF FERNDALE (NGVD29)
FERN 12 – SURFACE MONUMENT IN THE NW CORNER OF THE INTERSECTION OF SMITH & LABOUNTY ELEVATION = 341.27
POWERTEK #10 (NAIL/SHINER) ELEVATION = 34.82

11. STREET LIGHTING REQUIRED ON LABOUNTY ROAD FRONTAGE IN PART WITH THIS PROJECT MUST BE INSTALLED AND FUNCTIONING PRIOR TO PROJECT ACCEPTANCE BY PUBLIC WORKS AND FOR FINAL BUILDING OCCUPANCY.



TYP. PARKING DIMENSION
NOT TO SCALE

APPROVED
JUL 07 2023
BY CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS-BUILT SURVEY/CONTRACTOR AS-BUILT/INSPECTOR COMMENTS

AS-BUILT – RECORD DRAWINGS
JUNE 2023

NATHAN GLENN ROW
STATE OF WASHINGTON
90497
REGISTERED
PROFESSIONAL ENGINEER
7/27/2023

FULL SIZE DRAWING SHEET IS 24"x36" REDUCED SIZE COPIES ARE NOT TO SCALE

CALL 2 DAYS BEFORE YOU DIG 1-800-424-5555

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NO.	DATE	DESCRIPTION

APC ENGINEERS
Associated Project Consultants, Inc., P.S.
1401 Iowa Street Bellingham, WA 98225
PHONE 360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

FABER CONSTRUCTION
PACIFIC FERN - LOT 2

SITE PLAN

APC PROJECT # 15-107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 2 of 6

2

00738.002 07/07/23 RH

Jun 27, 2023 – 10:19am 15-107F Site Plan Record Drawing.dwg

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

Element #1 – Mark Clearing Limits
To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land–disturbing activities begin. All WORK shall be staked for line and grade in accordance with City of Ferndale Development Standards. In general, natural vegetation and native topsoil adjacent to work areas shall not be disturbed.

Element #2 – Establish Construction Access
Construction access or activities occurring on unpaved areas shall be minimized, yet where necessary, access points shall be stabilized to minimize the tracking of sediment onto public roads, and wheel washing, street sweeping, and street cleaning shall be employed when needed to prevent sediment from entering state waters.

Element #3 – Control Flow Rates
This project is not anticipated to impact downstream flow rates either during or after construction. However, the Contractor shall be responsible for monitoring stormwater runoff in and around the work area during construction, and taking measures as needed to prevent accumulation of runoff as a result of the work that could cause on–site erosion or impact surrounding or downstream properties and drainage conveyances.

Element #4 – Install Sediment Controls
All stormwater runoff from disturbed areas shall pass through an appropriate sediment removal BMP before leaving the construction site or entering a storm drainage conveyance. All existing drainage inlets that could accept runoff from the work area shall be protected with Storm Drain Inlet Protection (BMP C220). Where needed or as directed by the Engineer, Silt Fence (BMP C233) and/or Straw Wattles (BMP C235) may be implemented along the work area.

Sediment will be removed from paved areas in and adjacent to construction work areas manually or using mechanical sweepers, as needed, to minimize tracking of sediments on vehicle tires away from the site and to minimize washoff of sediments from adjacent streets in runoff.

Element #5 – Stabilize Soils
Exposed and unworked soils shall be stabilized with the application of effective BMPs to prevent erosion throughout the life of the project. In general, any slopes will be stabilized as soon as possible and soil stockpiles will be temporarily provided with Plastic Covering (BMP C123). All stockpiled soils shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

All disturbed areas along the sanitary sewer route shall be stabilized with Temporary and Permanent Seeding (BMP C120) or Mulching (BMP C121).

Element #6 – Protect Slopes
No cut and fill slopes are anticipated as part of this project.

Element #7 – Protect Drain Inlets
All storm drain inlets and culverts made operable during construction shall be protected to prevent unfiltered or untreated water from entering the drainage conveyance system. However, the first priority is to keep all access roads clean of sediment and keep street wash water separate from entering storm drains until treatment can be provided. Storm Drain Inlet Protection (BMP C220) will be implemented for all drainage inlets and culverts that could potentially be impacted by sediment–laden runoff on and near the project site.

Element #8 – Stabilize Channels and Outlets
Where site runoff is to be conveyed in channels, or discharged to a stream or some other natural drainage point, efforts will be taken to prevent downstream erosion. Where silt–laden runoff is conveyed from the work area in an open conveyance channel or ditch, the Contractor shall install Check Dams (BMP C207) as directed by the Engineer, at a typical spacing of 50–feet O.C.

Element #9 – Control Pollutants
All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well organized, and free of debris. If required, BMPs to be implemented to control specific sources of pollutants are discussed below.

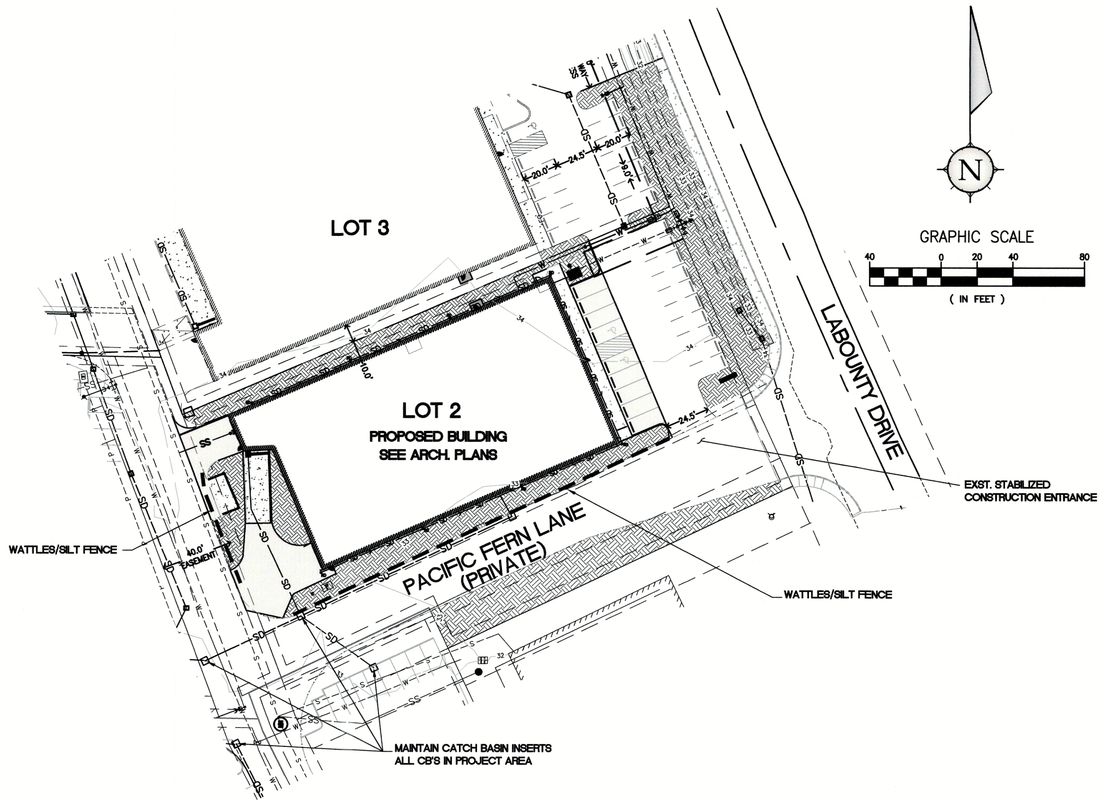
– All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected regularly to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
– On–site fueling tanks and petroleum product storage containers shall include secondary containment.
– Spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.
– In order to perform emergency repairs on site, temporary plastic will be placed beneath and, if raining, over the vehicle.
– Contaminated surfaces shall be cleaned immediately following any discharge or spill incident.
– Any chemicals stored in the construction areas will conform to the appropriate source control BMPs listed in Volume IV of the Ecology stormwater manual. In Western WA, all chemicals shall have cover, containment, and protection provided on site, per BMP C153 for Material Delivery, Storage and Containment
– Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application procedures and rates shall be followed.
– Dust released from demolished sidewalks, buildings, or structures will be controlled using Dust Control measures (BMP C140).
– Storm drain inlets vulnerable to stormwater discharge carrying dust, soil, or debris will be protected using Storm Drain Inlet Protection (BMP C220 as described above for Element 7).
– Process water and slurry resulting from sawcutting and surfacing operations will be prevented from entering the waters of the State by implementing Sawcutting and Surfacing Pollution Prevention measures (BMP C152).
– Process water and slurry resulting from concrete work will be prevented from entering the waters of the State by implementing Concrete Handling measures (BMP C151).

Element #10 – Control Dewatering
All dewatering water from open cut excavation, tunneling, foundation work, trench, or underground vaults shall be discharged into a controlled conveyance system prior to discharge to a sediment trap or sediment pond. Channels will be stabilized, per Element #8. Clean, non–turbid dewatering water will not be routed through stormwater sediment ponds, and will be discharged to systems tributary to the receiving waters of the State in a manner that does not cause erosion, flooding, or a violation of State water quality standards in the receiving water. Highly turbid dewatering water from soils known or suspected to be contaminated, or from use of construction equipment, will require additional monitoring and treatment as required for the specific pollutants based on the receiving waters into which the discharge is occurring. Such monitoring is the responsibility of the contractor.

However, the dewatering of soils known to be free of contamination will trigger BMPs to trap sediment and reduce turbidity. At a minimum, geotextile fabric socks/bags/cells will be used to filter this material. Other BMPs to be used for sediment trapping and turbidity reduction include the following:
– Concrete Handling (BMP C151)
– Use of a sedimentation bag, with outfall to a ditch or swale for small volumes of localized dewatering.

Element #11 – Maintain BMPs
All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. Maintenance and repair shall be conducted in accordance with each particular BMP's specifications. Visual monitoring of the BMPs will be conducted at least once every calendar week and within 24 hours of any rainfall event that causes a discharge from the site. If the site becomes inactive, and is temporarily stabilized, the inspection frequency will be reduced to once every month.

All temporary erosion and sediment control BMPs shall be removed within 30 days after the final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on site. Disturbed soil resulting from removal of BMPs or vegetation shall be permanently stabilized.



Element #12 – Manage the Project
Project management by the Contractor shall incorporate the key components listed below:

Phasing of Construction
The construction work shall be phased to the extent practicable to limit the length of open trenches and disturbed areas at one time, in order to prevent soil erosion, and, to the maximum extent possible, the transport of sediment from the site during construction.

Revegetation of disturbed areas and maintenance of that vegetation shall be an integral part of the work during each stage of construction, per the Scheduling BMP (C 162).

Inspection and Monitoring
All BMPs shall be inspected, maintained, and repaired as needed to assure continued performance of their intended function. A Certified Erosion and Sediment Control Lead shall be on–site or on–call at all times. Whenever inspection and/or monitoring reveals that the BMPs identified in this SWPPP are inadequate, due to the actual or potential discharge of a significant amount of any pollutant, appropriate BMPs or design changes shall be implemented as soon as possible.

Maintaining an Updated Construction SWPPP
This SWPPP shall be retained on–site or within reasonable access to the site.
The SWPPP shall be modified whenever there is a change in the design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.

Element #13 – Protect L.I.D. Features
Stormwater runoff for this site is managed in the Pacific Fern Business Park GBSP stormwater pond facility. No L.I.D. facilities are included in this site improvement.

EROSION CONTROL SPECIFICATIONS:

1. ALL DISTURBED AREAS OR EXPOSED SOILS SHALL BE COVERED WITH MULCH OR WOOD CHIPS IF SOILS ARE TO REMAIN UNWORKED FOR MORE THAN 2 DAYS, OCTOBER 1 THROUGH APRIL 30, OR 7 DAYS, MAY 1 THROUGH SEPTEMBER 30. UPON COMPLETION OF CONSTRUCTION, ALL DISTURBED AREAS AND CUT/FILL SLOPES ARE TO BE SEEDED WITH THE FOLLOWING EROSION CONTROL SEED MIXTURE:

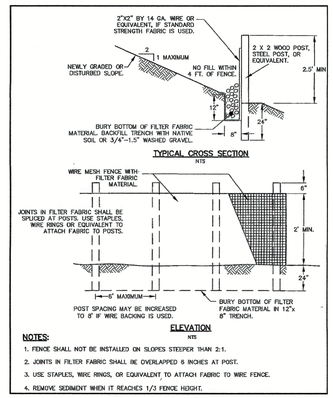
75–80% TALL FESCUE
10–15% SEASIDE/COLONIAL BENTGRASS
5–10% REDTOP

CONTRACTOR SHALL BE RESPONSIBLE FOR VEGETATION UNTIL IT IS FULLY ESTABLISHED, AS APPROVED BY THE ENGINEER.

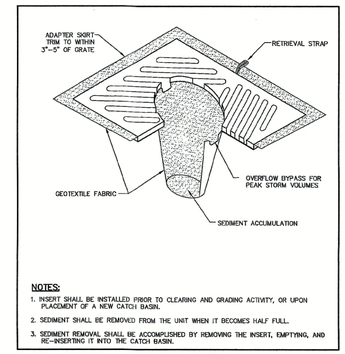
2. EXISTING CATCH BASINS ACCEPTING RUNOFF FROM THE SITE AND DRAINAGE INLETS PLACED INTO SERVICE PRIOR TO FULL SITE STABILIZATION SHALL BE PROTECTED WITH CATCH BASIN INSERTS PER THE DETAIL IN THIS TESCP.

3. ALL SAWCUTTING AND SURFACING SHALL BE PERFORMED IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY BMP C152. SLURRY AND CUTTINGS SHALL BE VACUUMED DURING DURING SAWCUTTING OPERATIONS, SHALL NOT REMAIN ON PERMANENT PAVEMENT OVERNIGHT, SHALL NOT DRAIN TO ANY NATURAL OR CONSTRUCTED DRAINAGE CONVEYANCE, AND SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.

SAFETY FENCING/SIGNING
SHALL BE BY CONTRACTOR



SILT FENCE
NOT TO SCALE



CATCH BASIN INSERT
NOT TO SCALE

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS–BUILT SURVEY/CONTRACTOR AS–BUILT/INSPECTOR COMMENTS

APPROVED
JUL 07 2023
BY
CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

EROSION CONTROL NOT AS–BUILT

AS–BUILT – RECORD DRAWINGS
JUNE 2023

NATHAN GLENN KOPP
STATE OF WASHINGTON
50497
REGISTERED
PROFESSIONAL ENGINEER
6/27/2023

FULL SIZE DRAWING SHEET IS 24"x36" REDUCED SIZE COPIES ARE NOT TO SCALE

CALL 2 DAYS BEFORE YOU DIG 1–800–424–5555

REVISIONS		
NO.	DATE	DESCRIPTION	BY

APC ENGINEERS
Associated Project Consultants, Inc., P.S.
1401 Astor Street Bellingham, WA 98225
PHONE 360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

FABER CONSTRUCTION
PACIFIC FERN - LOT 2
SWPPP & TESCP

APC PROJECT # 15–107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 3 of 6
3

00738.003 07/07/23 RH

Jun 27, 2023 – 10:16am 15–107F Site Plan Record Drawing.dwg

00738.004 07/07/23 RH

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CONSTRUCTION NOTES

1. INSTALL 6" SANITARY SEWER SERVICE LATERAL WITH CLEAN-OUTS PER CITY OF FERNDALE STANDARDS. SEE DETAIL SS-14 FOR CONNECTION DETAIL. FIELD VERIFY LOCATION, DEPTH, AND SIZE OF EXST. SEWER: SEE ARCHITECTURAL AND BUILDING MECHANICAL PLANS FOR SEWER/WASTE PIPE SIZES, LOCATIONS, AND CONNECTION TO BUILDING.

1A. CONNECT TO EXST. CITY 15"ø CONCRETE SEWER, SEE DETAIL SS-14. COORDINATE ANY SERVICE DISRUPTIONS WITH CITY AND OTHER PROPERTY OWNERS. LOCATION OF EXST. SEWER TO BE FIELD VERIFIED DURING CONSTRUCTION, SHOWN AS APPROXIMATE.

2. ALL DOORWAY TRANSITIONS AND FLOOR ELEVATIONS SHALL BE PER ARCHITECTURAL DESIGN. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER AND ARCHITECT OF ANY CONFLICTS.

3. EXTEND POTABLE WATER SERVICE PIPING TO BUILDING. SEE MECHANICAL PLANS FOR PIPE SIZE AND TYPE, LOCATION OF CONNECTION TO BUILDING, AND DETAILS.

4. RESTORE WITH LAWN/LANDSCAPE PER ARCHITECTURAL SITE PLAN.

5. ADA PARKING AND LOADING AREA. ADA SIGNAGE & DETAILS PER ARCH. PLANS

6. INSTALL FIRELINE TO BUILDING SPRINKLER SYSTEM. PIV TO BE LOCATED ON FACE OF BUILDING PER SPRINKLER DESIGN. APPROVED BACKFLOW PREVENTION DEVICE REQUIRED, PER FIRE SUPPRESSION DESIGN AND CITY STANDARDS. ALL PIPE JOINTS SHALL HAVE LOCKING GASKETS, MEGA LUG MJ RESTRAINTS ON ALL FITTINGS. SEE FIRE SUPPRESSION SYSTEM DESIGN, BY OTHERS, FOR SIZING AND DETAILS.

   CITY INSPECTIONS ARE REQUIRED TO VERIFY INSTALLATION METHODS AND RECORDING THRUST BLOCKS PRIOR TO BACKFILL. PRESSURE AND BACTERIOLOGICAL TESTING REQUIRED PER CITY OF FERNDALE STANDARDS. SEPARATION IS REQUIRED BETWEEN THE PROPOSED FIRELINE AND AND CITY'S WATER MAIN UNTIL PRESSURE TEST AND BACTERIOLOGICAL ANALYSIS IS SATISFACTORY. CONTRACTOR SHALL MAKE FINAL CONNECTION WITH CITY INSPECTOR PRESENT, INSPECTIONS SHALL BE SCHEDULED 24-HOURS IN ADVANCE.

   FIRE HYDRANT AND FDC LOCATIONS AND ADEQUACY TO BE AS DETERMINED BY WHATCOM COUNTY FIRE DIST. #7 (WCFD #7) REVIEW.

6A. INSTALL FDC ASSEMBLY W/ 6" D.I. TO DCVA VAULT. INSTALL 6" CHECK VALVE AND CONNECT TO DISCHARGE SITE OF DCVA ASSEMBLY.

7. INSTALL 6" CONCRETE SIDEWALK

8. 48-INCH HEIGHT LOADING DOCK, SEE ARCHITECTURAL PLANS AND DETAILS FOR DESIGN AT BUILDING

9. RETAINING WALL AT TRUCK RAMP. DESIGN BY OTHERS. SEE ARCHITECTURAL AND STRUCTURAL PLANS. PROVIDE HANDRAIL WHERE REQUIRED.

10. NOT USED

11. 6" CONCRETE SIDEWALK PAD AT DOOR TYP.

12. CONTRACTOR TO PROVIDE TYPE 1 SDCB AND PUMP FOR DRAINAGE AS NEEDED, WITH 2" PVC DISCHARGE TO CATCH BASIN. PUMP AND WIRING DETAILS TO BE SUBMITTED FOR FINAL APPROVAL AND TO COORDINATE WITH BUILDING PERMIT AS REQUIRED. SUMP PUMP LIBERTY PUMPS LE41A 2" SOLIDS HANDLING, OR APPROVED EQUAL. MAINTAIN CATCH BASIN INSERT IN PLACE TO REDUCE PUMP MAINTENANCE.

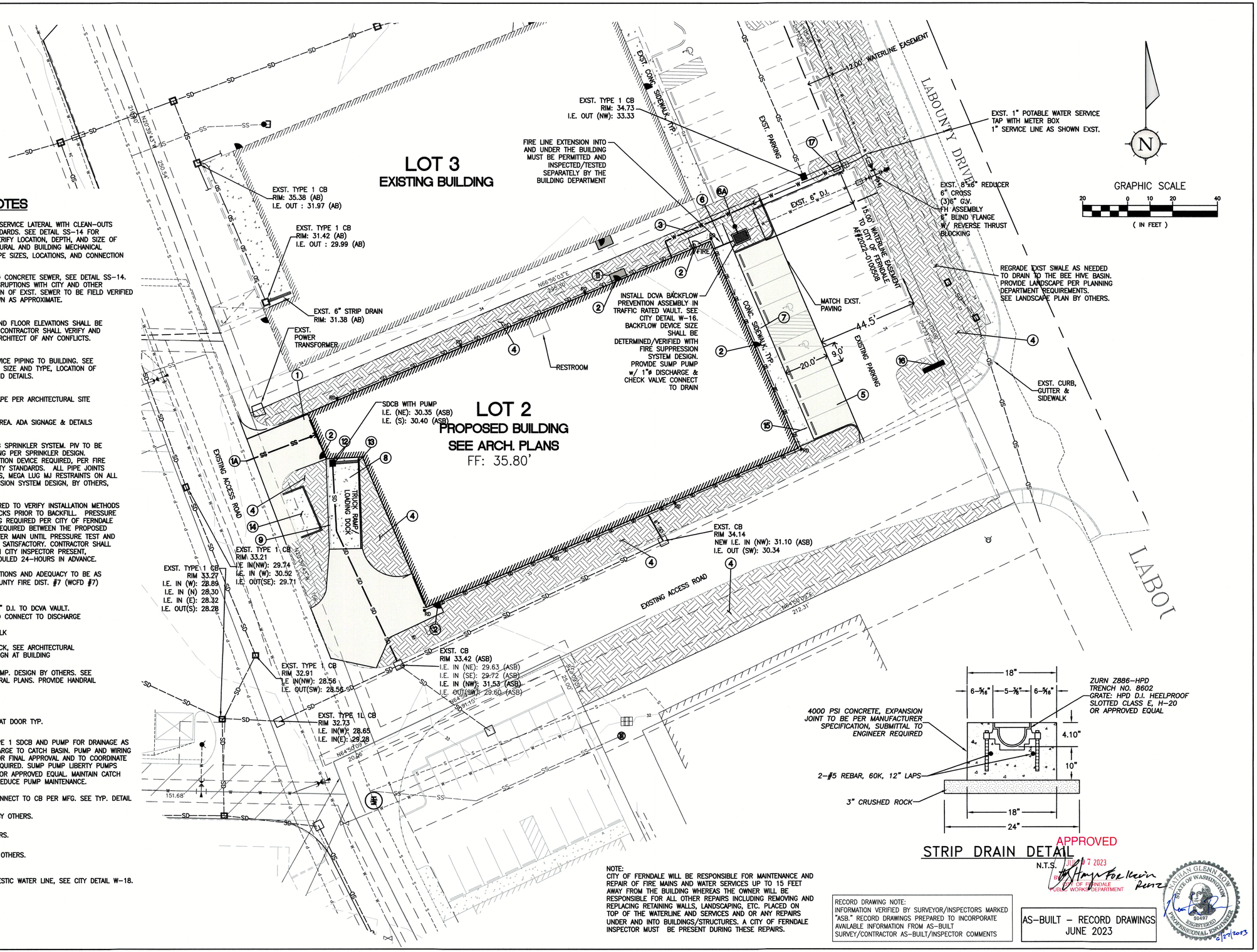
13. INSTALL LF STRIP DRAIN CONNECT TO CB PER MFG. SEE TYP. DETAIL

14. TRASH ENCLOSURE, DESIGN BY OTHERS. SEE ARCHITECTURAL PLANS.

15. BIKE RACK, DESIGN BY OTHERS. SEE ARCHITECTURAL PLANS.

16. PROPOSED SIGN, DESIGN BY OTHERS. SIGN PERMIT REQUIRED.

17. 1" DCVA REQUIRED ON DOMESTIC WATER LINE, SEE CITY DETAIL W-18.



STRIP DRAIN DETAIL
N.T.S.

NOTE:
CITY OF FERNDALE WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR OF FIRE MAINS AND WATER SERVICES UP TO 15 FEET AWAY FROM THE BUILDING WHEREAS THE OWNER WILL BE RESPONSIBLE FOR ALL OTHER REPAIRS INCLUDING REMOVING AND REPLACING RETAINING WALLS, LANDSCAPING, ETC. PLACED ON TOP OF THE WATERLINE AND SERVICES AND OR ANY REPAIRS UNDER AND INTO BUILDINGS/STRUCTURES. A CITY OF FERNDALE INSPECTOR MUST BE PRESENT DURING THESE REPAIRS.

APPROVED
JUL 07 2023
BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS-BUILT SURVEY/CONTRACTOR AS-BUILT/INSPECTOR COMMENTS

AS-BUILT - RECORD DRAWINGS
JUNE 2023

JONATHAN GLENN KOB
STATE OF WASHINGTON
20497
REGISTERED
PROFESSIONAL ENGINEER
5/24/2023

REVISIONS

NO.	DATE	DESCRIPTION	BY

APC ENGINEERING
Associated Project Consultants, Inc., P.S.
1401 Iowa Street Bellingham, WA 98225
PHONE 360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

FABER CONSTRUCTION
PACIFIC FERN - LOT 2

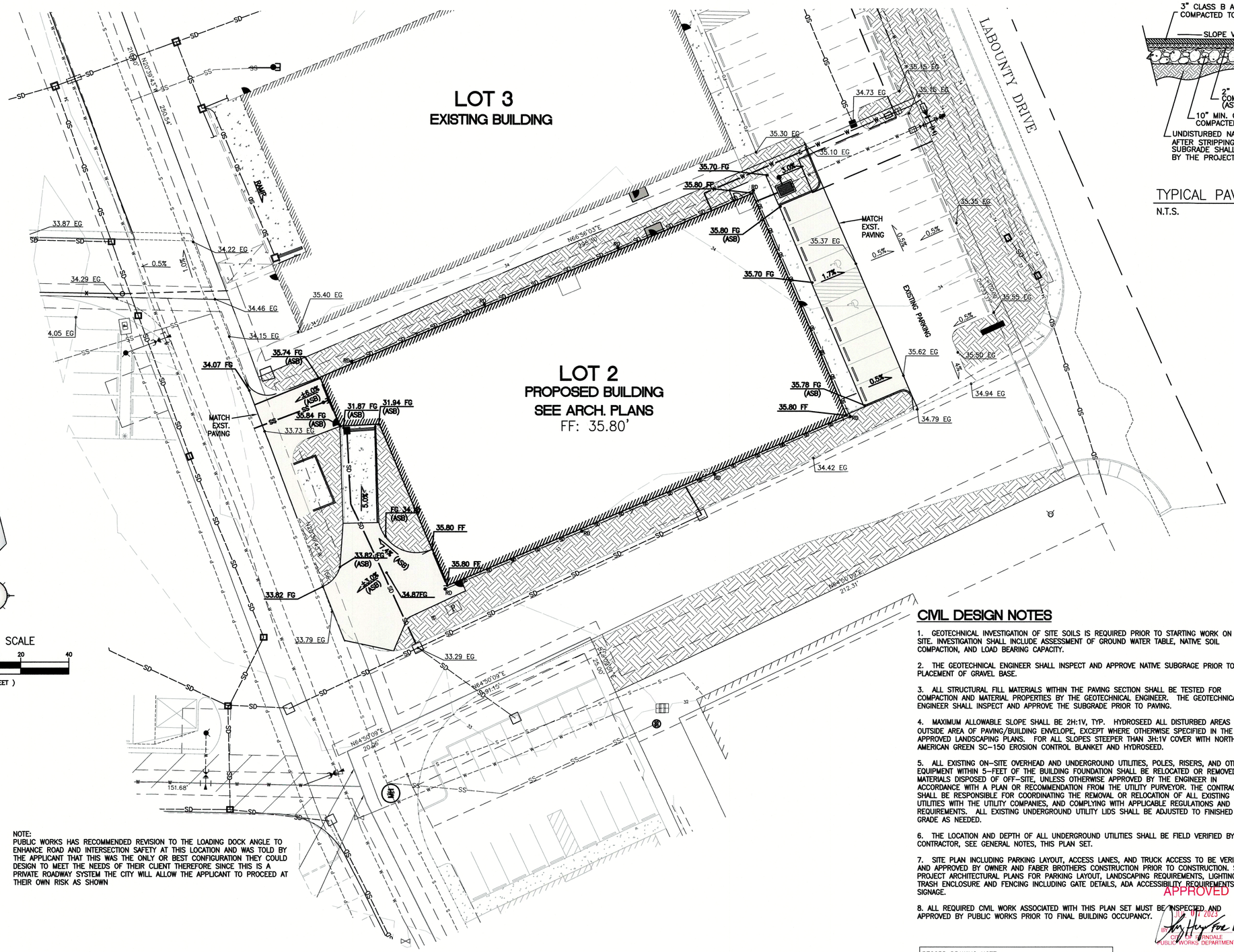
SITE WORK AND UTILITY PLAN

APC PROJECT # 15-107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 4 of 6

4

Jun. 27, 2023 - 10:14am 15-107F Site Plan Record Drawing.dwg



3" CLASS B A.C.P
COMPACTED TO 95% MAX. DENSITY

SLOPE VARIES

2" MIN. DEPTH CRUSHED SURFACING
COMPACTED TO 95% MAX. DRY DENSITY
(ASTM D-1557)

10" MIN. GRAVEL BASE
COMPACTED TO 95% MAX. DENSITY

UNDISTURBED NATURAL SUBGRADE
AFTER STRIPPING TOPSOIL.
SUBGRADE SHALL BE INSPECTED AND APPROVED
BY THE PROJECT GEOTECHNICAL CONSULTANT

TYPICAL PAVING SECTION

N.T.S.

NOTE:
PUBLIC WORKS HAS RECOMMENDED REVISION TO THE LOADING DOCK ANGLE TO ENHANCE ROAD AND INTERSECTION SAFETY AT THIS LOCATION AND WAS TOLD BY THE APPLICANT THAT THIS WAS THE ONLY OR BEST CONFIGURATION THEY COULD DESIGN TO MEET THE NEEDS OF THEIR CLIENT THEREFORE SINCE THIS IS A PRIVATE ROADWAY SYSTEM THE CITY WILL ALLOW THE APPLICANT TO PROCEED AT THEIR OWN RISK AS SHOWN

CIVIL DESIGN NOTES

1. GEOTECHNICAL INVESTIGATION OF SITE SOILS IS REQUIRED PRIOR TO STARTING WORK ON THE SITE. INVESTIGATION SHALL INCLUDE ASSESSMENT OF GROUND WATER TABLE, NATIVE SOIL COMPACTION, AND LOAD BEARING CAPACITY.

2. THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE NATIVE SUBGRADE PRIOR TO PLACEMENT OF GRAVEL BASE.

3. ALL STRUCTURAL FILL MATERIALS WITHIN THE PAVING SECTION SHALL BE TESTED FOR COMPACTION AND MATERIAL PROPERTIES BY THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE SUBGRADE PRIOR TO PAVING.

4. MAXIMUM ALLOWABLE SLOPE SHALL BE 2H:1V, TYP. HYDROSEED ALL DISTURBED AREAS OUTSIDE AREA OF PAVING/BUILDING ENVELOPE, EXCEPT WHERE OTHERWISE SPECIFIED IN THE APPROVED LANDSCAPING PLANS. FOR ALL SLOPES STEEPER THAN 3H:1V COVER WITH NORTH AMERICAN GREEN SC-150 EROSION CONTROL BLANKET AND HYDROSEED.

5. ALL EXISTING ON-SITE OVERHEAD AND UNDERGROUND UTILITIES, POLES, RISERS, AND OTHER EQUIPMENT WITHIN 5-FEET OF THE BUILDING FOUNDATION SHALL BE RELOCATED OR REMOVED AND MATERIALS DISPOSED OF OFF-SITE, UNLESS OTHERWISE APPROVED BY THE ENGINEER IN ACCORDANCE WITH A PLAN OR RECOMMENDATION FROM THE UTILITY PURVEYOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL OR RELOCATION OF ALL EXISTING UTILITIES WITH THE UTILITY COMPANIES, AND COMPLYING WITH APPLICABLE REGULATIONS AND REQUIREMENTS. ALL EXISTING UNDERGROUND UTILITY LIDS SHALL BE ADJUSTED TO FINISHED GRADE AS NEEDED.

6. THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR, SEE GENERAL NOTES, THIS PLAN SET.

7. SITE PLAN INCLUDING PARKING LAYOUT, ACCESS LANES, AND TRUCK ACCESS TO BE VERIFIED AND APPROVED BY OWNER AND FABER BROTHERS CONSTRUCTION PRIOR TO CONSTRUCTION. SEE PROJECT ARCHITECTURAL PLANS FOR PARKING LAYOUT, LANDSCAPING REQUIREMENTS, LIGHTING, TRASH ENCLOSURE AND FENCING INCLUDING GATE DETAILS, ADA ACCESSIBILITY REQUIREMENTS, AND SIGNAGE.

8. ALL REQUIRED CIVIL WORK ASSOCIATED WITH THIS PLAN SET MUST BE INSPECTED AND APPROVED BY PUBLIC WORKS PRIOR TO FINAL BUILDING OCCUPANCY.

APPROVED
JUN 07 2023
BY CITY OF FERNDALE
PUBLIC WORKS DEPARTMENT

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS-BUILT SURVEY/CONTRACTOR AS-BUILT/INSPECTOR COMMENTS

AS-BUILT - RECORD DRAWINGS
JUNE 2023

NATHAN GLENN ROW
STATE OF WASHINGTON
90767
REGISTERED
PROFESSIONAL ENGINEER
6/27/2023

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PHONE 360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

FABER CONSTRUCTION
PACIFIC FERN - LOT 2

GRADING AND PAVING PLAN

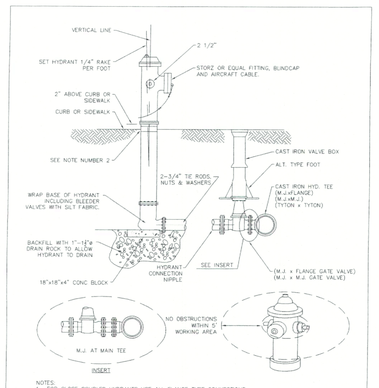
APC PROJECT # 15-107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 5 of 6

5

00738.005 07/07/23 RH

Jun. 27, 2023 - 10:12am 15-107F Site Plan Record Drawing.dwg

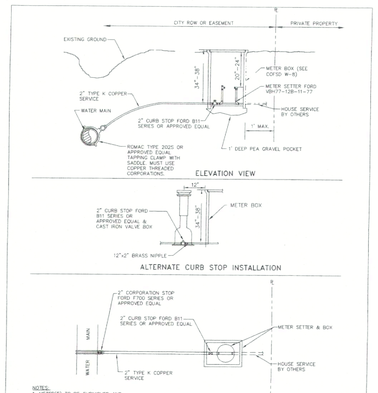


NOTES:
1. FOR CLOSE COUPLED HYDRANTS USE ALL FLANGE TYPE CONNECTIONS.
2. IF HYDRANT RISES THROUGH CONCRETE USE EXPANSION STRIP AROUND HYDRANT BARREL.
3. ALL HYDRANT ASSEMBLIES WILL BE M&H MODEL 929T.

AUGUST 2, 2017

APPROVED — Public Works Director — 8/11/17 Date

FIRE HYDRANT ASSEMBLY
STANDARD DETAIL W-1
NOT TO SCALE

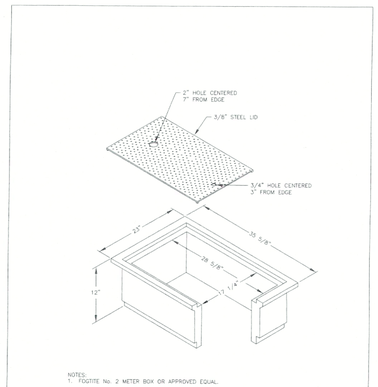


NOTES:
1. METER(S) TO BE FURNISHED AND INSTALLED TO BE PLACED IN SERVICE TRENCH TO BE BACKFILLED WITH 12" MIN. DEPTH OF CLEAN SANDY FILL.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

TYPICAL 2" WATER SERVICE
STANDARD DETAIL W-5A
NOT TO SCALE

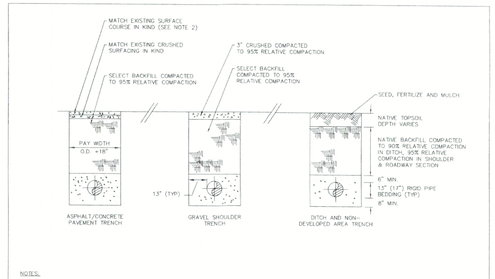


NOTES:
1. FOOTITE No. 2 METER BOX OR APPROVED EQUAL.
2. FOR USE WITH WATER SERVICE IN PLANTER/LANDSCAPE AREA OR OUTSIDE OF SIDEWALK.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

¾" AND 1" CONCRETE METER BOX
STANDARD DETAIL W-6
NOT TO SCALE

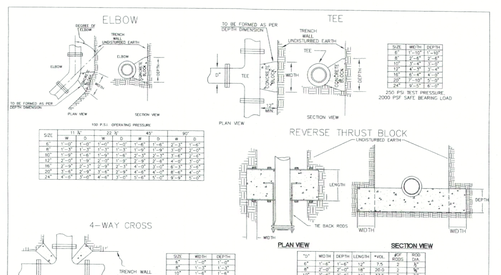


NOTES:
1. NATIVE BACKFILL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.
2. SELECT BACKFILL/CRUSHED SURFACE COURSE SHALL BE COMPACTED TO 95% COMPACTION.
3. PAVEMENT SHALL BE SAW CUT, TACKED, AND COMPACTED TO SIZE OF ABSOLUTE DENSITY.
4. P.C.C. REPLACEMENT SHALL BE 2" GREATER THAN EXISTING COURSE, 7" MINIMUM, 6.5 P.C.C. (HEC – AIR ENTRAINED)
5. ALL TRENCH RESTORATION SHALL MEET CITY STANDARDS.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

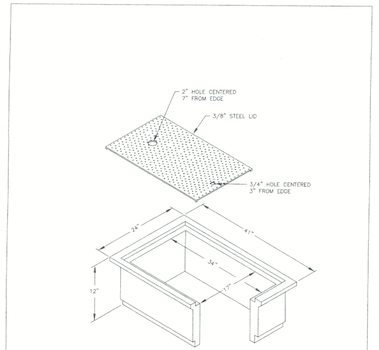
WATER TRENCHING DETAIL
STANDARD DETAIL W-11
NOT TO SCALE



NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

THRUST BLOCKING DETAIL
STANDARD DETAIL W-2
NOT TO SCALE

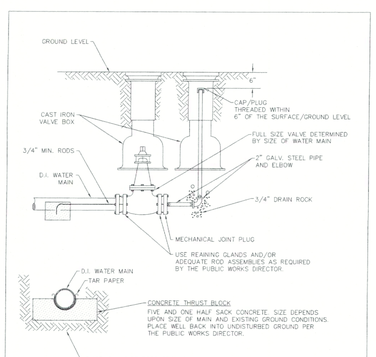


NOTES:
1. FOOTITE No. 3 METER BOX OR APPROVED EQUAL.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

2" CONCRETE METER BOX
STANDARD DETAIL W-8
NOT TO SCALE

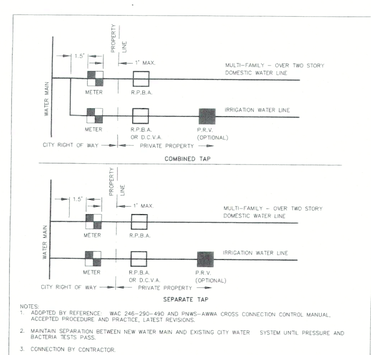


2" BLOW-OFF TO BE USED WHERE THE MAIN WILL BE EXTENDED IN THE FUTURE. FOR MAINS WITH NO FURTHER EXTENSION, REFER TO 2" BLOW-OFF, NON-EXTENDABLE MAIN.

AUGUST 1, 2017

APPROVED — Public Works Director — 8/11/17 Date

2" BLOW-OFF FUTURE WATERMAIN EXTENSION
STANDARD DETAIL W-9
NOT TO SCALE



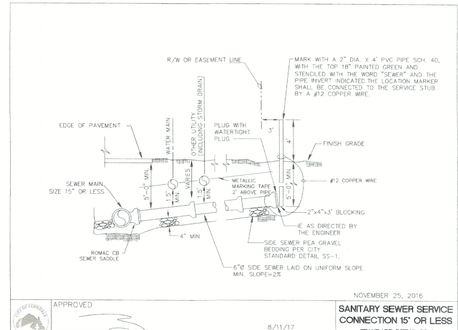
NOTES:
1. ADOPTED BY REFERENCE: WAC 246-290-490 AND FINAL–AWWA CROSS CONNECTION CONTROL MANUAL, ACCEPTED PROCEDURE AND PRACTICE, LATEST REVISIONS.
2. MAINTAIN SEPARATION BETWEEN NEW WATER MAIN AND EXISTING CITY WATER SYSTEM UNTIL PRESSURE AND BACTERIA TESTS PASS.
3. CONNECTION BY CONTRACTOR.
4. NOTIFY CITY 24–HOURS PRIOR TO SCHEDULE INSPECTION.
5. ALL FIXTURES OUTSIDE OF THE CITY RIGHT OF WAY ARE TO BE PRIVATELY MAINTAINED.
6. IRRIGATION SYSTEMS THAT REQUIRE A DCVA OR SYSTEMS THAT CONTAIN PUMPS OR INJECTORS FOR THE ADDITION OF CHEMICALS SHALL ENSURE THAT AN APPROVED AIR GAP OR AN RPBA IS INSTALLED FOR THE PREMISES LOCATIONS.

ABBREVIATIONS:
1. R.P.B.A. STATE APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY
2. P.R.V. APPROVED PRESSURE REDUCING VALVE
3. D.C.V.A. STATE APPROVED DOUBLE CHECK VALVE ASSEMBLY

AUGUST 1, 2017

APPROVED — Public Works Director — 8/11/17 Date

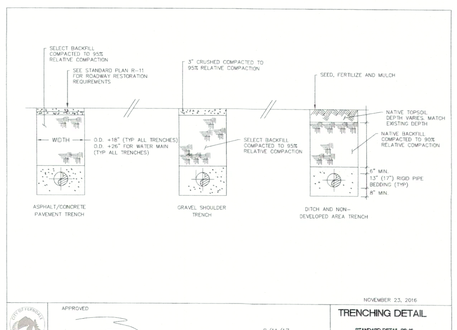
COMMERCIAL AND MULTI FAMILY IRRIGATION AND DOMESTIC WATER METER PLACEMENT
STANDARD DETAIL W-10
NOT TO SCALE



NOVEMBER 25, 2016

APPROVED — Public Works Director — 8/11/17 Date

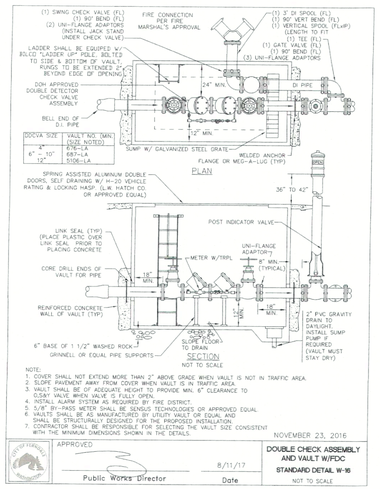
SANITARY SEWER SERVICE CONNECTION 15" OR LESS
STANDARD DETAIL SS-6
NOT TO SCALE



NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

TRENCHING DETAIL
STANDARD DETAIL SS-16
NOT TO SCALE

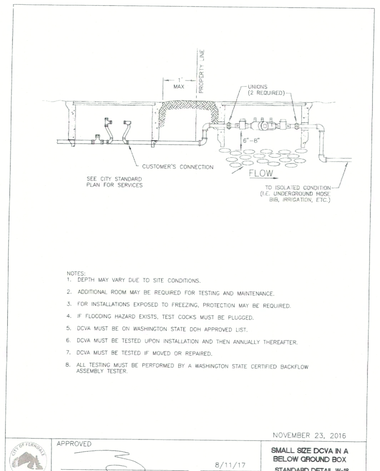


NOTE:
1. COVER SHALL NOT EXTEND MORE THAN 2" ABOVE GRADE WHEN VAULT IS NOT IN TRAFFIC AREA.
2. SLOPE PAVEMENT AWAY FROM COVER WHEN VAULT IS IN TRAFFIC AREA.
3. VAULT SHALL BE OF ADEQUATE HEIGHT TO PROVIDE MIN. 6" CLEARANCE TO CLOSET VALVE WHEN VALVE IS FULLY OPEN.
4. INSTALL ALARM SYSTEM AS REQUIRED BY FIRE DISTRICT.
5. ALL VAULT METER SHALL BE SENSUS TECHNOLOGIES OR APPROVED EQUAL.
6. VAULTS SHALL BE DESIGNED FOR AASHTO H-20 LOADING OR EQUAL AND SHALL BE STRUCTURALLY DESIGNED FOR PROPOSED INSTALLATION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE VAULT SIZE CONSISTENT WITH THE MINIMUM DIMENSIONS SHOWN IN THE DETAILS.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

DOUBLE CHECK ASSEMBLY AND VAULT W/FDC
STANDARD DETAIL W-16
NOT TO SCALE

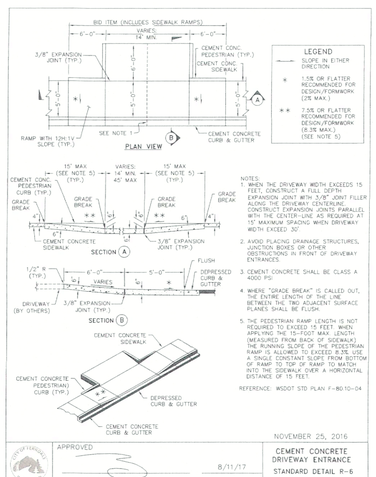


NOTES:
1. DEPTH MAY VARY DUE TO SITE CONDITIONS.
2. ADDITIONAL ROOM MAY BE REQUIRED FOR TESTING AND MAINTENANCE.
3. FOR INSTALLATIONS EXPOSED TO FREEZING, PROTECTION MAY BE REQUIRED.
4. IF FLOODING HAZARD EXISTS, TEST COCKS MUST BE PLUGGED.
5. DCVA MUST BE ON WASHINGTON STATE DOH APPROVED LIST.
6. DCVA MUST BE TESTED UPON INSTALLATION AND THEN ANNUALLY THEREAFTER.
7. DCVA MUST BE TESTED IF MOVED OR REPAIRED.
8. ALL TESTING MUST BE PERFORMED BY A WASHINGTON STATE CERTIFIED BACKFLOW ASSEMBLY TESTER.

NOVEMBER 23, 2016

APPROVED — Public Works Director — 8/11/17 Date

SMALL SIZE DCVA IN A BELOW GROUND BOX
STANDARD DETAIL W-18
NOT TO SCALE



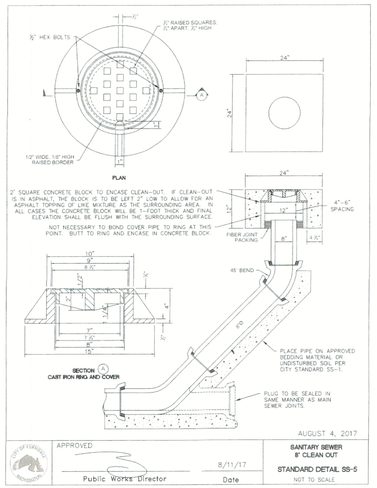
NOTES:
1. WHEN THE DRIVEWAY WIDTH EXCEEDS 15 FEET, CONSTRUCT A FULL DEPTH EXPANSION JOINT WITH 3/8" JOINT FILLER ALONG THE DRIVEWAY CENTERLINE. CONSTRUCT EXPANSION JOINTS PARALLEL TO THE CENTER–LINE AS REQUIRED AT 15' MAXIMUM SPACING WHEN DRIVEWAY WIDTH EXCEED 30'.
2. AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF DRIVEWAY ENTRANCES.
3. CEMENT CONCRETE SHALL BE CLASS A 4000 PSI.
4. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE LINE BETWEEN THE TWO ADJACENT SURFACE PLANES SHALL BE FLUSH.
5. THE PEDESTRIAN RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET WHEN APPLYING THE 15–FOOT MAX. LENGTH (MEASURED FROM BACK OF SIDEWALK). THE RUNNING SLOPE OF THE PEDESTRIAN RAMP IS ALLOWED TO EXCEED 8.3% USE A SINGLE CONSTANT SLOPE FROM BOTTOM OF RAMP TO TOP OF RAMP TO MATCH INTO THE SIDEWALK OVER A HORIZONTAL DISTANCE OF 15 FEET.

REFERENCE: WSDOT STD PLAN F-80.10-04

NOVEMBER 25, 2016

APPROVED — Public Works Director — 8/11/17 Date

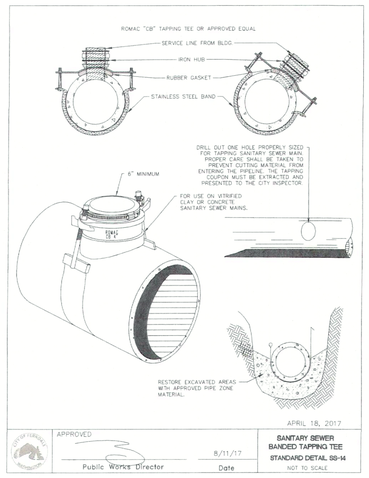
CEMENT CONCRETE DRIVEWAY ENTRANCE
STANDARD DETAIL R-6
NOT TO SCALE



AUGUST 4, 2017

APPROVED — Public Works Director — 8/11/17 Date

SANITARY SEWER 8" CLEAN OUT
STANDARD DETAIL SS-5
NOT TO SCALE



APRIL 18, 2017

APPROVED — Public Works Director — 8/11/17 Date

SANITARY SEWER BANDED TAPPING TEE
STANDARD DETAIL SS-14
NOT TO SCALE

APPROVED
JUL 07 2023
BY: CITY OF FERNDALE PUBLIC WORKS DEPARTMENT

RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS–BUILT SURVEY/CONTRACTOR AS–BUILT/INSPECTOR COMMENTS

AS–BUILT – RECORD DRAWINGS JUNE 2023

NATHAN GLENN ROW — STATE OF WASHINGTON — 98497 — REGISTERED PROFESSIONAL ENGINEER — 7/07/2023

REVISIONS		
NO.	DATE	DESCRIPTION	BY

FULL SIZE DRAWING SHEET IS 24"x36" REDUCED SIZE COPIES ARE NOT TO SCALE

CALL 2 DAYS BEFORE YOU DIG 1-800-424-5555

00738.006 07/07/23 RH

APC ENGINEERS
Associated Project Consultants, Inc. P.S.
1401 Astor Street Bellingham, WA 98225
PHONE:360.671.1146 FAX 360.671.1169
CIVIL ENGINEERING | LAND USE | PROJECT MANAGEMENT

FABER CONSTRUCTION
PACIFIC FERN - LOT 2
DETAILS

APC PROJECT # 15–107F
DESIGNED: NGR
DRAWN: KJB
CHECKED:

Sheet 6 of 6

6

Jun 27, 2023 – 10:24am 15-107F Site Plan Record Drawing.dwg